

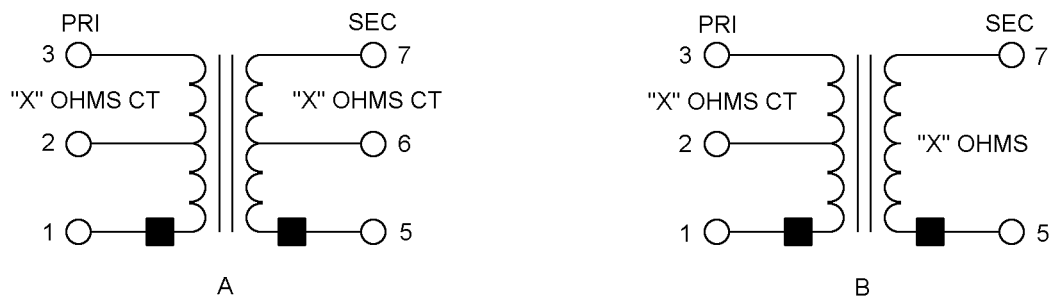
MIL-PRF-27/67B
2 June 2003
SUPERSEDING
MIL-PRF-27/67A
18 May 1977

TRANSFORMERS, AUDIO FREQUENCY

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-27.



Inches	mm	Inches	mm
.005	0.13	.156	3.96
.020	0.51	.187	4.75
.030	0.76	.200	5.08
.031	0.79	.500	12.70
.052	1.32	.800	20.32
.062	1.57	1.000	25.40
.112	2.84	1.085	27.56
.125	3.18	1.125	28.58



WORKING VOLTAGE: "X" V
ALTITUDE: 70 kFT MAX
(SEE TABLE I FOR VALUE OF "X")

CIRCUIT DIAGRAMS AND MARKING

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± 0.010 (0.25 mm).
4. Marking shall be on sides and/or top of case.
5. Electrical values shall be marked as specified in table I, as applicable.

FIGURE 1. Dimensions and configuration – Continued.

MIL-PRF-27/67B

REQUIREMENTS: (When numbers in parentheses, i.e., (1.-3) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings: See table I.

Frequency range: 60 hertz to 10 kilohertz.

Power level: 500 milliwatts maximum at 60 hertz.

TABLE I. Electrical ratings. 1/

Dash number	Circuit diagram (see figure 1)	Primary impedance ohms (1-3)	Secondary impedance ohms (5-7)	Primary DCR ohms $\pm 25\%$ (1-3)	Secondary DCR ohms $\pm 25\%$ (5-7)	Primary unbalanced DC current max (mA)	Working voltage
01	A	10,000 CT	10,000 CT	700	900	1.0	355
02	A	10,000 CT	600 CT	700	50	1.0	355
03	B	10,000 CT	4	700	0.37	1.0	355
04	B	1,500 CT	15	93	1.2	2.5	175
05	A	1,000 CT	600 CT	65	50	3.0	175
06	B	1,000 CT	4	65	0.37	3.0	175
07	A	600 CT	600 CT	37	50	4.0	175
08	A	600 CT	60 CT	37	5	4.0	175
09	B	600 CT	15	37	1.2	4.0	175
10	B	600 CT	4	37	0.37	4.0	175
11	A	250 CT	600 CT	16	50	7.0	175

1/ Qualification testing and approval to M27/67-01 shall be sufficient to grant qualification approval to M27/67-02 through M27/67-11, inclusive. Qualification by similarity can be obtained for MIL-PRF-27/68, /69, /70, /71, and /72 by the submission of two samples each, (of dash number 01 for MIL-PRF-27/68, /69, /70, /71, and /72) which shall be subjected to group A, subgroup II tests, with zero defects allowed.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Plastic.

Terminals: Pin (printed circuit).

Material: Nickel iron alloy, tin plated.

Diameter: $0.30 \pm .005$ inch

Length: $.500 \pm .030$ inch.

Weight: 73.71 grams.

Altitude: 70,000 feet, maximum.

MIL-PRF-27/67B

Operating temperature range: -55°C to +130°C.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.

Dielectric withstanding voltage:

At sea level: 1,000 volts rms (except 500 volts rms on M27/67-04 through M27/67-11).

At barometric pressure: 444 volts rms (except 300 volts rms on M27/67-04 through M27/67-11).

Electrical characteristics: See table II.

Frequency response.

Reference frequency: 1 kilohertz.

Polarity: Additive, with terminals 3 and 5 connected.

TABLE II. Electrical characteristics.

Dash number	Frequency response at 60 Hz to 10 kHz ± 1 dB			
	Z _s (1-3) ohms	Z _L (5-7) ohms	E _L volts	Primary dc current (1-3) mA
01	10 k	10 k	16.0	0.5
02	10 k	600	16.0	0.5
03	10 k	4	16.0	0.5
04	1.5 k	15	6.0	1.25
05	1.0 k	600	5.0	1.5
06	1.0 k	4	5.0	1.5
07	600	600	4.0	2.0
08	600	60	4.0	2.0
09	600	15	4.0	2.0
10	600	4	4.0	2.0
11	250	600	4.0	3.5

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/67- (dash number from table I).

MIL-PRF-27/67B

Custodians:

Army – CR
Navy – EC
Air Force – 11

Preparing activity:

DLA – CC

(Project 5950-1098)

Review activities:

Army – AR, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, 99